

Project

Extract action rules from the attached [dataset](#). The attribute/column D in this dataset shows the Fragile States Index (FSI) which is the decision feature. The FSI scores should be interpreted with the understanding that the lower the score, the better. Therefore, a reduced score indicates an improvement and greater relative stability, just as a higher score indicates greater instability. Clearly, the decision feature needs to be discretized. Action rules should suggest what changes in values of classification features are needed to lower FSI. Follow the discretization presented in this article:

https://en.wikipedia.org/wiki/Fragile_States_Index

[Lisp Miner](#) can be used (<http://lispminer.vse.cz/>) to extract action rules ([Video Lecture](#)). Before defining action rule mining task in LISp-Miner (module: Ac4ft-Miner) you need to analyze attributes in your dataset, which one is stable/flexible and how to define your analytical task (hypothesis). You should analyze a couple of the rules (with the highest support) to suggest actions that can be taken for the chosen countries to change their status to less fragile.

There is no specific format for the report, but the mandatory parts are: description of the problem area (your understanding of the problem in your own words), description of the preprocessing method performed on the dataset, report and analysis of action rule mining results. Your report should be concise and using your own wording.